

Application No. 09/526,628  
Amendment "F" dated January 5, 2006  
Reply to Office Action mailed November 3, 2005

### REMARKS

The latest Office Action, mailed November 3, 2005, considered and rejected claims 23-28, 40-45, 51, 53-67, 69-74 and 84-86. Claims 84-86 were rejected under 35 U.S.C. § 112, second paragraph as failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. Claims 23-26, 40-43 and 51 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of Forde (U.S. Patent No. 6,819,711). Claims 84-86 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of Forde (U.S. Patent No. 6,819,711) and further in view of Official Notice. Claims 57 and 58 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of ISO/IEC 13818-1. Claims 27, 28, 44, 45 and 53-56 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of DeFreese (U.S. Patent No. 6,493,876).<sup>1</sup> Claims 59-65 and 70-74 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of Wugofski (U.S. Patent No. 6,003,041). Claims 66, 67 and 69 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ko (U.S. Patent No. 6,486,925) in view of Wugofski (U.S. Patent No. 6,003,041) and further in view of DeFreese (U.S. Patent No. 6,493,876).<sup>2</sup>

By this paper, claims 23 and 84-86 have been amended,<sup>3</sup> and no claims have been added or cancelled, such that claims 23-28, 40-45, 51, 53-67, 69-74 and 84-86 remain pending, of which claims 23, 40, 59 and 71 are the only independent claims at issue.

<sup>1</sup> Dependent claims 27 and 28 depend from independent claim 23 and dependent claims 44, 45, 57 and 58 depend from independent claim 40 and, accordingly, these dependent claims incorporate all of the limitations of their respective base claims. Inasmuch as the references relied upon by the Examiner in rejecting these base claims (i.e. Ko, Wugofski, and ISO/IEC 13818-1) appear not to teach or suggest the claimed limitation relating to updating incorrect or outdated service records, Applicants presume, for the sake of argument, that the Examiner intended the rejections of such claims to be based on the cited references *further in light of Forde*.

<sup>2</sup> Although the prior art status and some of the assertions made with regard to the cited art is not being challenged at this time, because it is not necessary, for reasons described herein, Applicants reserve the right to challenge the prior art status and assertions made with regard to the cited art, as well as any official notice, which was taken in the last response, at any appropriate time in the future, should the need arise, such as, for example in a subsequent amendment or during prosecution of a related application. Accordingly, Applicants' decision not to respond to any particular assertions or rejections in this paper should not be construed as Applicants acquiescing to said assertions or rejections.

<sup>3</sup> Support for the claim amendments is found throughout the specification, including, but not limited to page 27 and Figure 7.

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The first two independent claims 23 and 40 disclose a method and corresponding computer program product for efficiently tuning to different channels, including digital channels. As recited, these claims include storing tuning information (e.g., channel identifiers) in service records. The recited embodiments also include extracting additional tuning information from one or more digital data streams that is necessary for subsequent tuning to the one or more corresponding digital channels. This additional tuning information is also stored and used to subsequently tune to the digital channels and in such a way that it does not have to be re-extracted. However, when the additional tuning information is incorrect or outdated, and because it is incorrect or outdated, tuning to the selected channel is unsuccessful. Then, in response to unsuccessfully tuning to the channel, the service record is updated with updated information and the updated information is thereafter used to successfully tune to the selected channel.

While Ko, which is the primary reference relied upon by the Examiner in rejecting claims 23 and 40, is generally directed to a channel managing apparatus and method for automatically switching to a tuner for receiving the type of broadcasting corresponding with a channel selected by a user, Applicants respectfully submit that Ko, even when combined with Forde, fails to make obvious the claimed invention. For instance, the cited art, whether alone or in combination, fails to teach or suggest using additional tuning information to tune to the selected channel after unsuccessfully using the extracted tuning information and thereby determining that the extracted additional tuning information is incorrect or outdated, and in response thereto, updating the service record with updated information and thereafter using the updated information from the service record to successfully tune to the selected channel, as claimed.

In fact, the Examiner has acknowledged that Ko fails to disclose an act of updating extracted additional tuning information when the extracted additional tuning information is incorrect or outdated and tuning to a selected channel is unsuccessful. (Office Action, p. 4). For this teaching, the Examiner relies upon the Forde reference.

Forde, however, similarly fails to teach an act of unsuccessfully tuning to a selected channel due, at least in part, to the extracted additional tuning information being incorrect or outdated and, in response, updating the service record with updated information usable to successfully tune to the selected channel. In fact, Forde fails to disclose the use of any tuning information for tuning to a selected channel, let alone unsuccessfully tuning to a selected channel

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due to incorrect or outdated tuning information, or updating tuning information which is thereafter used to successfully tune to the selected channel. In contrast,

In particular, Forde discloses a quality determination system in which the quality of a communications channel carrying information units is established. (Col. 3, ll. 37-40). In the disclosed system, data packets are received over a communication channel and their reception is monitored. (Col. 3, ll. 41-42; Col. 4, ll. 10-13). In addition, a counter value is stored which is indicative of the quality of the communications channel. (Col. 3, ll. 43-44; Col. 6, ll. 31-33). If a packet is incorrectly received, a first update operation is performed to update the counter by incrementing it by a first fraction. (Col. 3, ll. 45-47; Col. 6, ll. 33-40). In contrast, if a packet is correctly received, a second update operation is performed to update the counter by decrementing it by a second fraction. (Col. 3, ll. 47-50; Col. 6, ll. 40-44). Based on the value of the counter, a status can be determined to indicate whether the quality of the communications channel is good or bad. (Col. 5, ll. 20-22). If the channel quality is determined to be bad, communication is initiated over a different system channel. (Col. 5, ll. 23-30).

Accordingly, Forde appears to disclose a communication channel quality evaluation system in which a *counter* is incremented or decremented based on the quality of a communication channel, and fails to teach that the counter is *tuning information*, let alone that (i) tuning is unsuccessful (only that some data packets are not received), (ii) unsuccessful tuning of a channel is due, at least in part, to the additional tuning information being incorrect or outdated; or (iii) in response updating a service record with updated information used to successfully tune to the selected channel, as claimed. Stated another way, in contrast to the recited claim, in which tuning to a channel is initially unsuccessful because channel information is incorrect or outdated, Forde teaches that data transmitted over a channel is not received correctly because the quality of the channel is poor. The quality of the connection channel, rather than the value of the counter, determines whether a data packet is received; moreover, Forde fails to disclose using updated information (i.e. the counter) to successfully tune to the selected channel. In fact, where a data connection is poor, the counter is used to communicate over a *different channel*. As a result, Forde, whether alone or in combination with Ko, fails to teach or suggest each and every limitation of the present invention.

It will also be noted that even assuming, *arguendo*, that Forde did provide the recited claim limitation, Forde is not analogous art and there is no suggestion or motivation to combine

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the cited references. For instance, while the present invention is directed to a system and method for tuning channels of a variety of different broadcast types, Forde does not deal, in any manner, with different broadcast types. Rather, Forde relates to determining channel qualities and appears to be directed to a single broadcast type.

Additionally, a suggestion or motivation to combine references must be found within the nature of the problem to be solved, the teachings of the prior art, or the knowledge of persons of ordinary skill in the art, and cannot be taken from knowledge gleaned from Applicants' disclosure. M.P.E.P. §§ 2143.01(I); 2145(X)(A). In the Office Action, the Examiner states that "[i]t would have been obvious for one skilled in the art at the time of the invention to modify the data storing techniques taught by Ko with updating the extracted additional tuning information when the extracted additional tuning information is incorrect or outdated, such that the tuning to the selected channel is unsuccessful as taught by Forde." (Office Action, p. 4). As noted previously, Forde fails to disclose any tuning information, let alone tuning information that was updated. Accordingly, Forde fails to provide the suggestion as recited by the Examiner. Further, Applicants respectfully note that the language supplied by the Examiner for providing the suggestion is taken directly from Applicants disclosure, rather than from either the nature of the problem to be solved, the teaching of the prior art, or the knowledge of persons of ordinary skill in the art. Accordingly, Applicants respectfully submit that the provided suggestion or motivation to combine is the result of impermissible hindsight, and results only from Applicants' own disclosure.

As noted previously, claims 59 and 71 have also been rejected under 35 U.S.C. § 103(a) as unpatentable over Ko in view of Wugofski. Claims 59 and 71 are directed to corresponding embodiments relating to the user experience for navigating to and selecting a channel to be tuned to. As recited, these claims include storing a plurality of service records that each contains tuning information for tuning to various channels. The service records are also categorized into service spaces that are displayed to a user. As further recited, the service spaces are categorized into the service spaces by *content type*. When one of the service spaces is selected, the corresponding service record information is displayed. Then, when one of these corresponding service records is selected, the channel corresponding to the selected service record is tuned using the tuning information provided in the service record.

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These recited embodiments are also clearly distinguished from the cited art of record. In particular, the cited art fails to disclose or suggest, among other things, that service records displayed to a user are categorized according to content type, particularly when considering the service records correspond to a plurality of different broadcast types. Instead, the cited disclosure of Ko discloses channels that "are provided from multiple sources and assembled into a single channel map" and in which channels are ordered in the channel map "based on the broadcast type." (Office Action, p. 2-3; see also Ko, Col. 5, ll. 10-34; Ko, Col. 6, ll. 35-44).

Similarly, the cited disclosure of Wugofski fails to disclose categorizing service records into a plurality of service spaces according to content type, as claimed. In particular, Wugofski (Figure 6) appears to disclose a channel map database structure in which different columns are used to identify categories corresponding to different types of information that can be used for tuning to a channel. For instance, logical and physical channels, a source, a receiving device, and a name may be saved. Applicants respectfully submit that these column categories fail to identify a content type, let alone categorize a plurality of service records into a plurality of service spaces according to content type, as claimed.

In view of the foregoing, the rejections of record are now moot, such that it is not necessary to address each of the other assertions of record in the last response. Nevertheless, Applicants reserve the right to challenge any of said assertions in the future. Accordingly, although the foregoing remarks are primarily directed to the independent claims, it will be appreciated that the dependent claims should also be found allowable over the art of record for at least the same reasons. Accordingly, it is not necessary to individually address the rejections to each of the dependent claims at this time. Nevertheless, a few of the dependent claims will be addressed by the following remarks, to even further distinguish the claimed invention over the art of record.

Claims 84 and 85, for example, were presented in the previous amendment and recite embodiments in which: (i) at least one of the service records includes a time condition, which causes the service record to point to another service record when the time condition is unsatisfied (claim 84); and (ii) input for pausing and resuming a program is received and in which the system determines an appropriate channel to return to that is different than the initially selected channel and that started at a different time than the selected channel (claim 85). As noted previously, these claims were rejected based, in part, on Official Notice taken by the Examiner.

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To the extent the Examiner wishes to continue reliance on the taken Official Notice, Applicants respectfully request that the Examiner supply references disclosing the claimed elements, and further include the requisite suggestion or motivation to combine such references with any additional, cited art.

Claim 86 was also presented in the previous action and recites an embodiment in which the method for tuning to a channel includes receiving aggregate information corresponding to a plurality of different channels over a single channel. As also noted above, this claim was rejected under 35 U.S.C. § 103(a) in partial reliance upon Official Notice taken by the Examiner. In particular, the Examiner took Official Notice that "it is notoriously well known in the art to receive channel information of a single channel so as to efficiently receive channel information." (Office Action, p. 6). Applicants respectfully submit that this is not what is claimed. In particular, Claim 86 recites receiving *aggregate* information corresponding to a *plurality of different channels* over a single channel. Inasmuch as the Official Notice is limited to channel information of *a single channel*, rather than *aggregate* information corresponding to a *plurality of different channels* claimed, Applicants submit that the claim is allowable over the cited art and Official Notice.

Furthermore, with regard to the Official Notice, if for any reason the Examiner issues a final rejection following this amendment, Applicants remind the Examiner that it is generally against accepted examination guidelines to finally reject a claim while relying on Official Notice. MPEP § 2144.03(A) ("While 'official notice' may be relied on, these circumstance should be rare when an application is under final rejection").

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Accordingly, for at least the forgoing reasons, Applicants respectfully submit that the pending claims 23-28, 40-45, 53-67, 69-74 and 84-86 should now be found in condition for prompt allowance. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 5 day of January, 2006.

Respectfully submitted,



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